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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/478,144	01/05/2000	Christopher M Herring	P04659	1299

7590 04/02/2003
John L. MAXIN
national Semiconductor
801 East Campbell Road Suite 525
Richardson, TX 75081

EXAMINER

WAITE, SCOTT A

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 04/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/478,144	HERRING ET AL.	
	Examiner	Art Unit	
	Scott A. Waite	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 11-20 is/are rejected.
- 7) ☒ Claim(s) 7-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The attempt to incorporate subject matter into this application by reference to docket number P04658 is improper because the patent application serial number for the abandoned case is available.

Claim Rejections - 35 USC § 112

2. Claims 5 recites the limitation "the at least 75 channels" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is noted that claim 1 calls for at least 75 hopping frequencies. Claims 16 – 19 have the same problem. Claims 11 & 12 recite the limitation "the B field" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4 – 6 & 13 - 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kockmann et al. (USPN 6,434,183 B1) in view of Fazel et al. (USPN 6,275,506 B1).

a. As to claim 1, 4, 13, 18 & 20, in Fig. 1, Kockmann discloses a slow hopping RF module 4 that operates when allocation of the channels from the DECT

Standard are matched to the ISM band as in Fig. 4. Kockmann fails to explicitly disclose at least 75 hopping frequencies and a minimum hop rate of 2.5 hops per second. In another related radio transmission patent, Fazel discloses that within the frequency hopping domain it is well known to use a minimum frequency hopping rate of 2.5 hops per second in conjunction with 79 frequencies spaced 1 MHz apart when motivated to combat indoor interference and use the ISM band (2.4 – 2.4835 GHz). See col. 1, lines 51 – 56 & col. 2, lines 45 – 55. Moreover, it is generally considered to be within the ordinary skill in the art to adjust, vary, select or optimize the numerical parameters or values of any system absent showing of criticality in a particular recited value. Therefore, it would have been prima fascia obvious to one of ordinary skill in the art at the time the invention was made to use a minimum frequency hopping rate of 2.5 hops per second with at least 75 frequencies spaced 1.063 MHz apart in the range 2401.122 MHz to 2479.813 MHz when integrating DECT hardware with the ISM band when motivated to combat indoor interference, a known problem of the integration.

b. As to claims 2, 14 & 15, in Table 3, Fazel discloses the required number of equal size timeslots required for supporting slow speed (Data transfer) and high speed (DAB) applications. The claimed concurrent voice and data communications read on the data transfer and DAB applications. When the same amount of timeslots are assigned to voice as data, then the time slots within the frame share equal amounts of time.

c. As to claim 5 & 19, in Fig. 2, Kockmann discloses a 10ms frame.

d. As to claim 6, neither Kockmann nor Fazel explicitly disclose frames of 16 time slots. However, it is generally considered to be within the ordinary skill in the art to adjust, vary, select or optimize the numerical parameters or values of any system absent showing of criticality in a particular recited value. Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to alter the number of timeslots in order to facilitate the integration of other aspects of the invention.

e. As to claim 16, in Fig. 3, Kockmann discloses plural timeslots $Z1...Zx$, each on separate frequency channels fx .

f. As to claim 17, in Fig. 4, Kockmann discloses plural timeslots Zx that change frequencies fx after a predetermined number of consecutive frames $RX1$, $RX2$.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kockmann in view of Fazel in further view of Smith et al. (US 20020034171 A1). Kockmann & Fazel disclose all the features of claim 3 except for a 32 bit preamble, 64 bit A-field and a 320 bit B-field and 4 bits for CRC. In fig. 3, Smith discloses that the basic DECT physical data packet contains a 32 bit preamble, 64 bit A-field and a 320 bit B-field and 4 bits for CRC. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a 32 bit preamble, 64 bit A-field and a 320 bit B-field and 4 bits for CRC when motivated to create a system that is compatible with the basic DECT physical data packet.

Allowable Subject Matter

6. Claims 7 – 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott A. Waite whose telephone number is 703-305-7869. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 308-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Scott A. Waite
Examiner
Art Unit 2663

saw *SW*
March 26, 2003

Chau T. Nguyen
CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600